

Applicant: Christopher Rixon et al.
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REMARKS

Drawings

The drawings stand objected to for failing to comply with 37 CFR 1.84(p)(5) because they do not include the reference numeral 74 referred to in the specification. Please replace the original drawing sheet including FIG. 2 with the attached Replacement Sheet including FIG. 2. FIG. 2 has been amended to add reference numeral 74 indicating a channel 74 of nut 44 to overcome this rejection.

Claims

Claims 1-17 are pending in the application with claims 1 and 11 being independent. Claims 11-17 have been added. No claims have been amended or canceled as part of this Amendment.

Claim Rejections- Obviousness Type Double Patenting

Claims 1-10 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,698,309. Claims 1-10 also stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application Serial No. 10/225,256, which has now been issued as U.S. Patent No. 7,191,680. Claims 1-6 of the recently issued '680 patent did not substantially change during prosecution, prior to issuance. Therefore, Applicants anticipate that the Examiner will change the provisional rejection based on Application Serial No. 10/225,256 to a full rejection based on claims 1-6 of the '680 patent. Applicant respectfully traverses the double patenting rejection to claims 1-10 based on U.S. Patent No. 6,698,309. Applicant also respectfully traverses the anticipated double patenting rejection to claims 1-10 based on U.S. Patent No. 7,191,680.

According to MPEP §804, obviousness-type double patenting occurs when any claim in an application being examined is not patentably distinct from subject matter claimed in a

granted patent or another application (provisional rejection). In this case, the Examiner contends that claims 1-10 of the subject application are not patentably distinct from claims 1-7 of the '309 patent or claims 1-6 of the '680 patent. Applicants submit that the Examiner is incorrect in this contention. Although claims 1-10 of the subject application have some similar limitations with claims 1-7 of the '309 patent and claims 1-6 of the '680 patent, claims 1-10 are quite distinct from these claims.

Independent claim 1 of the subject application recites an a first sensor 56 including a first sensing member 58 for generating a first control signal and a second sensor 56 including a second sensing member 58 for generating a second control signal. The first sensor includes a first sliding member 60 movable relative to the first sensing member 58 to vary the magnitude of the first control signal. The sensors 56 are associated with first 16 and second 24 pedal levers to determine the adjustment position of these pedal levers 16, 24 and maintain a predetermined relationship between the pedal levers 16, 24. In one embodiment, this helps prevent a condition known as "step-over" from occurring between the pedal levers 16, 24. In other words, the sensors 56 assist in controlling adjustment of the pedal levers 16, 24 such that the pedal levers 16, 24 are adjusted at substantially similar rates to prevent one pedal lever from being at a more forward or rearward position in an operator space than the other.

None of claims 1-7 of the '309 patent or claims 1-6 of the '680 patent recite sensors for determining the adjustment positions of pedal levers. Instead, the claims of the '309 patent recite a memory for summing electrical pulses sent from a controller to track pedal lever position and the claims of the '680 patent do not recite any component whatsoever for tracking pedal lever position (the specification of the '680 patent indicates that, like the '309 patent, a memory is used to sum electrical pulses sent from a controller to track pedal lever position). In summary, the pedal systems disclosed in the '309 patent and the '680 patent do not utilize sensors that generate control signals to determine pedal lever position, contrary to claim 1 of the subject application. For this reason alone, claims 1-10 of the subject application are patentably distinct over claims 1-7 of the '309 patent and claims 1-6 of the '680 patent. As a further distinction, claim 1 of the subject application goes on to recite that the first sensor 56

includes a first sliding member 60 that is movable relative to a first sensing member 58 to vary the magnitude of a first control signal. This is a further deviation from the claims of the '309 and '680 patents. A comparison of claim 1 from the subject application and claim 1 from the '309 patent (see TABLE 1) and a comparison of claim 1 from the subject application and claim 1 from the '680 patent (see TABLE 2) demonstrates this point.

TABLE 1

Claim 1 from the subject application	Claim 1 from the '309 patent
<p>1. An adjustable pedal assembly comprising;</p> <p>a first support (12),</p> <p>a first pedal lever (16) supported by said first support (12) for rotation about an operational axis (A) relative to said first support (12),</p> <p>a first adjustment mechanism (20) including a first drive (40) and a first follower (38) movably responsive to said first drive (40) and coupled to said first pedal lever (16) for adjusting said first pedal lever (16) between a first plurality of adjusted positions relative to said first support (12) upon movement of said first drive (40),</p> <p><u>a first sensor (56) including a first sensing member (58) for generating a first control signal that varies in magnitude as said first pedal lever (16) moves between the first plurality of adjusted positions.</u></p> <p>a second support (14) adjacent said first support (12),</p> <p>a second pedal lever (24) supported by said second support (14) for rotation about a second operational axis (B) relative to said second support (14),</p> <p>a second adjustment mechanism (32) including a second drive (40) and a second follower (38) movably responsive to said second drive (40) and coupled to said second pedal lever (24) for adjusting said second pedal lever (24) between a second plurality of adjusted positions relative to said second support (14) upon movement of said second drive (40),</p> <p><u>a second sensor (56) including a second sensing member (58) for generating a second control signal that varies in magnitude as said</u></p>	<p>1. An adjustable pedal assembly comprising;</p> <p>a support (12),</p> <p>a first pedal lever (14) pivotally supported for rotation about an operational axis (A) relative to said support (12),</p> <p>a first adjustment mechanism (21) including a first motor (52) for adjusting said first pedal lever (14) between a first plurality of adjusted positions relative to said support (12) upon operation of said first motor (52),</p> <p>a second pedal lever (34) pivotally supported for rotation about a second operational axis (B) relative to said support (12),</p> <p>a second adjustment mechanism (41) including a second motor (52) for adjusting said second pedal lever (34) between a second plurality of adjusted positions relative to said support (12) upon operation of said second motor (52), and</p>

<p><u>second pedal lever (24) moves between the second plurality of adjusted positions, and</u></p> <p>a controller (78) programmed for detecting a stall of either of said adjustment mechanisms (20, 32) based on the control signals generated by said sensors (56) to maintain a predetermined relationship between said pedal levers (16, 24),</p> <p> said assembly characterized by <u>said first sensor (56) including a first sliding member (60) fixed to said first follower (38) and movable with said first pedal lever (16) between the first plurality of adjusted positions and relative to said first sensing member (58) to vary the magnitude of the first control signal.</u></p>	<p>a controller (56) programmed for operating said first (52) and second (52) motors to simultaneously move said first (14) and second (34) pedal levers between said adjusted positions and for detecting a stall of each of said motors (52),</p> <p> said assembly characterized by said controller (56) having a coordinator (66) for automatically repositioning at least one of said motors (52) to a corrected position in response to a stall by at least one of said motors (52) thereby repositioning at least one of said pedal levers (14,34) relative to the other to maintain a predetermined relationship between said pedal levers (14,34).</p>
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TABLE 2

Claim 1 from the subject application	Claim 1 from the '680 patent
<p>1. An adjustable pedal assembly comprising;</p> <p> a first support (12),</p> <p> a first pedal lever (16) supported by said first support (12) for rotation about an operational axis (A) relative to said first support (12),</p> <p> a first adjustment mechanism (20) including a first drive (40) and a first follower (38) movably responsive to said first drive (40) and coupled to said first pedal lever (16) for adjusting said first pedal lever (16) between a first plurality of adjusted positions relative to said first support (12) upon movement of said first drive (40),</p> <p> <u> a first sensor (56) including a first sensing member (58) for generating a first control signal that varies in magnitude as said first pedal lever (16) moves between the first plurality of adjusted positions.</u></p> <p> a second support (14) adjacent said first support (12),</p>	<p>1. An adjustable pedal assembly comprising;</p> <p> a support (12) for mounting said assembly to a vehicle structure,</p> <p> a first pedal lever (14) pivotally supported for rotation about an operational axis (A) with respect to said support (12),</p> <p> a first electrically operated stepper motor (52) including a first set of windings (54) for sequentially moving in increments of movement and interconnection said support (12) and said first pedal lever (14) for adjusting the operational position of said pedal lever (14) relative to said support (12) between a plurality of adjusted positions,</p>

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<p>a second pedal lever (24) supported by said second support (14) for rotation about a second operational axis (B) relative to said second support (14),</p>	<p>a second pedal lever (34) pivotally supported for rotation about a second operational axis (B) with respect to said support (12),</p>
<p>a second adjustment mechanism (32) including a second drive (40) and a second follower (38) movably responsive to said second drive (40) and coupled to said second pedal lever (24) for adjusting said second pedal lever (24) between a second plurality of adjusted positions relative to said second support (14) upon movement of said second drive (40),</p>	<p>a second electrically operated stepper motor (52) including a second set of windings (54) for sequentially moving in increments of movement and interconnecting said support (12) and said second pedal lever (34) relative to said support (12)(B) between a plurality of adjusted positions, and</p>
<p><u>a second sensor (56) including a second sensing member (58) for generating a second control signal that varies in magnitude as said second pedal lever (24) moves between the second plurality of adjusted positions, and</u></p>	<p>a controller (78) programmed for detecting a stall of either of said adjustment mechanisms (20, 32) based on the control signals generated by said sensors (56) to maintain a predetermined relationship between said pedal levers (16, 24),</p>
	<p>a controller (56) that sends pulses of electrical energy sequentially to said respective windings (54) to incrementally rotate said first (52) and second (53) motors, said assembly characterized by including a timer (62) that measures the time to reach a predetermined resistance condition of either of said windings during each pulse and that terminates energy to both of said windings in response to said time being below a predetermined time period</p>
<p>said assembly characterized by <u>said first sensor (56) including a first sliding member (60) fixed to said first follower (38) and movable with said first pedal lever (16) between the first plurality of adjusted positions and relative to said first sensing member (58) to vary the magnitude of the first control signal.</u></p>	

Upon a careful review of claims 1-10 of the subject application against claims 1-7 of the '309 patent and claims 1-6 of the '680 patent, Applicants believe that the Examiner will find claims 1-10 to be patentably distinct and therefore withdraw the double patenting rejection.

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Applicants believe the application is now in condition for allowance, which allowance is respectfully solicited. Applicants believe there are no fees required. In any event; however, the Commissioner is authorized to charge our Deposit Account No. 08-2789 in the name of Howard & Howard Attorneys, P.C. for any additional fees or credit the account for any overpayment.

Respectfully submitted,
HOWARD & HOWARD ATTORNEYS

April 12, 2007
Date

/Trent K. English/
Trent K. English, Registration No. 56,951
The Pinehurst Office Center, Suite #101
39400 Woodward Avenue
Bloomfield Hills, MI 48304-5151
(248) 723-0462